Electrical Safety Checklist

Occupational Safety & Health Bureau



Montana Department of Labor & Industry

Prepared for Montana Employers By the

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Electrical Safety Checklist

Installation, Housekeeping, and Maintenance

1	Switch, outlet, receptacle, device, and junction boxes are of sufficient size to provide free space for all conductors enclosed in the box.
2	There are no gaps or open spaces greater than 1/8 th of an inch at the edges of the box or fitting.
3	Electrical equipment and machinery are keep clean.
4	Sufficient access and working space is provided and maintained around electrical equipment such as panel boards, switch boards and safety switches.
5	Illumination is provided for all working space around service equipment, switchboards, or motor control centers installed indoors.
6	Electrical equipment is kept free of recognized hazards. Check for broken wires, missing box covers and faceplates, broken plugs and overheated equipment.
7	15 and 20-ampere attachment plugs and connections are dead-front construction.
8	Parts of electrical equipment which in ordinary operations produce arcs, flames, sparks, or molten metal (except electric welders) are enclosed or separated and isolated from all combustible and flammable material.
9	Electric panelboards, cabinets, boxes, and switch enclosures are covered or isolated.
10	All disconnecting means, service, feeder and branch circuits are legibly marked to indicate its purpose, unless located and arranged so the purpose is evident.
11	Electric equipment is legibly marked with the manufactures name or trademark, current, wattage, and voltage.
12	Doors or gates to vaults, equipment rooms, and similar enclosures are kept locked to prevent entry to unauthorized personnel.
13	Live parts of electric equipment operating at 50 volts or more are guarded against accidental contact.

14	All conductors are spliced or joined with splicing devices suitable for use or by brazing, welding, or soldering with a fusible metal or alloy.
Overcurrent l	Devices
1	Overcurrent devices are easily accessible.
2	Fuses and circuit breakers are located or shielded so that employees will not be burned or otherwise injured by their operation.
Grounding	
1	All paths from ground to circuits, equipment, and enclosed are permanent and continuos.
2	Exposed, non-current carrying metal parts of fixed equipment which may become energized are grounded.
3	Cable, conduit, joints, etc. are tight to assure proper grounding. Conduit and enclosures are free from rust and corrosion.
4	Grounding conductors and bonding jumpers are connected by exothermic welding, listed pressure connectors, clamps, or equivalent means.
Portable Tool	s
1	Portable tools are properly grounded, unless double insulated and identified as such.
2	Attachment plugs are suitable for the conditions of use and location.
3	Grounded prongs are present.
4	Cords are not frayed or broken. The plug is dead-front.
5	Grounding adapters are green-colored rigid ear, lug, or similar device.

Temporary Wiring		
1	Temporary wiring is used only:	
	 during and for remodeling, maintenance, repair or demolition and similar activities; for experimental or developmental work; and for a time not to exceed 90 days for decorative lighting such as Christmas, carnivals and similar events. 	
2	Ground-fault circuit interrupters are used during a period of construction on all temporary wiring for 15 and 20 ampere 125 volt single phase receptacles.	
Flexible	Cords	
1	Flexible cords are not used as a substitute for fixed wiring.	
2	Flexible cords are not run through a wall, ceiling, floor, doorway, window or similar opening.	
3	Flexible cords are not attached to a building surface, such as a wall.	
4	Flexible cords are used in continuous lengths without splice or tap.	
5	Flexible cords are free from recognized hazards.	
6	A strain relief is used where flexible cords are attached to plugs, connector bodies, or other devices.	
7	Portable headlamps are equipped with insulating material and a guard.	
Boxes, H	Enclosures, and Wiring Methods	
1	All boxes and enclosures are securely fastened.	
2	Conduit and cable is securely supported.	
3	Conduit, cable, boxes and enclosures are kept free from recognized hazards such as exposed runs, flattened conduit bends, improvised fittings, etc.	

Lighting Fixtures		
1	Overhead lights are supported securely.	
2	Lighting is not mounted to close to combustible materials.	
Appliances		
1	Electrically heated appliances are kept away from combustible materials.	
Hazardous (Classified) Locations		
1	Electrical equipment used in a hazardous area is specifically designed for that area.	

References

- National Electric Code (1993)
 29 Code of Federal Regulation 1910.303 –1910.305 (1994)